

SMART-HOME INTEGRATION FOR DECOFLAME FIREPLACE

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1. How to Connect Your Device to the Internet via WiFi portal ►

Connecting your device to the internet is a straightforward process using WiFiManager. Follow these steps to get your device online:

Step-by-Step Guide:

1	Power on Your Device: <ul style="list-style-type: none">- Ensure your device is powered on.
2	Connect to the Device's WiFi Network: <ul style="list-style-type: none">- On your smartphone, tablet, or computer, go to the WiFi settings.- Look for a network named `DecoflameAP` (or similar).- Connect to this network. The default password is `123456789`.
3	Open a Web Browser: <ul style="list-style-type: none">- Once connected to the device's WiFi network, open a web browser.- You will automatically be redirected to the WiFiManager configuration portal. If not, type `192.168.4.1` in the address bar and press Enter.
4	Select Your Home WiFi Network: <ul style="list-style-type: none">- In the WiFiManager portal, you will see a list of available WiFi networks.- Select your home WiFi network from the list.
5	Enter Your WiFi Password: <ul style="list-style-type: none">- Enter the password for your home WiFi network.- Click on "Save" or "Connect".
6	Wait for Connection: <ul style="list-style-type: none">- Your device will now attempt to connect to your home WiFi network.- Once connected, you will see a confirmation message.
7	Reconnect Your Device to Your Home WiFi: <ul style="list-style-type: none">- Your device is now connected to the internet.- You can now use your device as intended and access its features via the internet.

Troubleshooting:

1	Cannot Find the Device's WiFi Network: <ul style="list-style-type: none">- Ensure the device is powered on.- Move closer to the device to ensure a stronger WiFi signal.- Restart your device and try connecting again.
2	Cannot Access the WiFiManager Portal: <ul style="list-style-type: none">- Ensure you are connected to the device's WiFi network.- Try typing `192.168.4.1` in the address bar manually.- Try a different web browser.

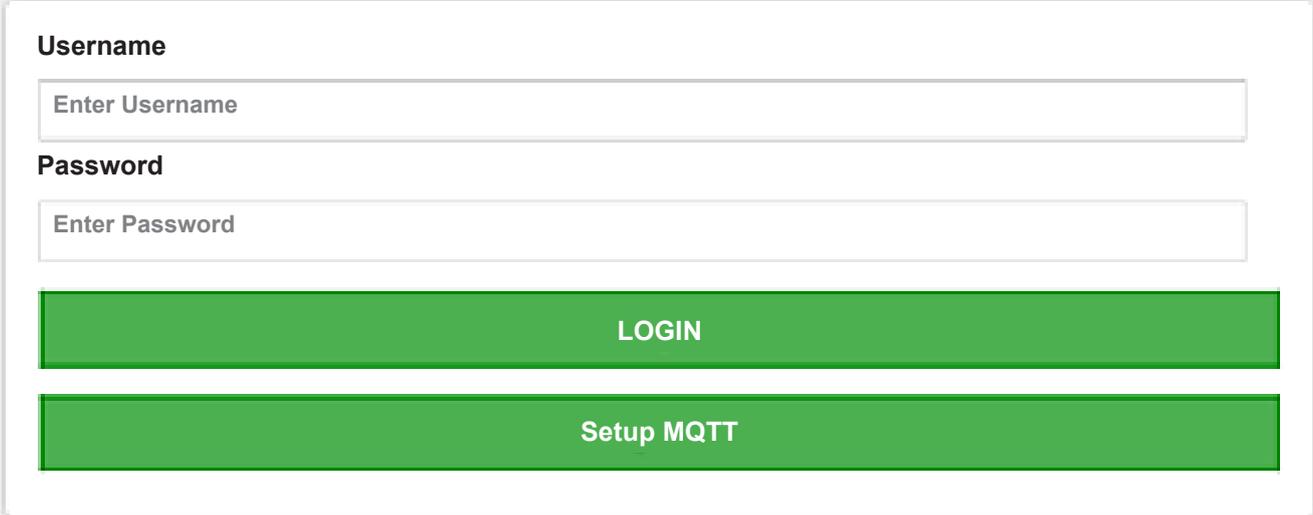
By following these steps, you should be able to connect your device to the internet using WiFiManager.

If you encounter any issues, please refer to the troubleshooting section or contact our support-team for assistance.

2. Setting up the MQTT credentials ▶

How to Input Your Information

Step-by-Step Guide:



Username

Password

LOGIN

Setup MQTT

1	Acces the webserver - After the fireplace is connected to WiFi you have to fill in MQTT server information. To acces the webpage go to a webbrower. In the address bar fill in your device ID followed by .local this should look something like "decof853e5c.local"
2	Acces the MQTT setup page - Ensure you are connected to the device's WiFi network. - Try typing `192.168.4.1` in the address bar manually. - Try a different web browser.

MQTT Server

MQTT Port

MQTT Username

MQTT Password

Device ID: deco853E5C

Save Settings

3	<p>Fill in your MQTT information</p> <ul style="list-style-type: none">- Fill in your MQTT settings in the correct placeholders. <p>After filling in the information press the "Save settings" button to save the data to the internal storage. The MQTT should now work.</p>
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3. Guide to Using MQTT with Decoflame fireplace ▶

This guide explains how to communicate with your biofireplace using MQTT, including how to connect to the broker, subscribe to topics, and publish messages. Understanding these concepts will help you control and monitor your biofireplace effectively.

A	<p>Overview</p> <p>MQTT (Message Queuing Telemetry Transport) is a lightweight messaging protocol ideal for ToT devices. Your biofireplace uses MQTT to communicate with a server (broker) and other devices. This guide will help you understand how to use MQTT to control and monitor your biofireplace.</p>
B	<p>Connecting to the MQTT Broker</p> <p>To start, your biofireplace must connect to an MQTT broker. The broker acts as a central hub, managing all messages sent between devices. The basic information needed to connect includes:</p> <ul style="list-style-type: none">- MQTT Server Address: The IP address or hostname of the MQTT broker.- Port: The network port on which the broker is listening (usually 1883 for non-secure or 8883 for secure connections).- Username and Password: Credentials for authenticating with the broker.
C	<p>MQTT Topics</p> <p>Topics are fundamental to MQTT communication. They are like channels where messages are published and subscribed.</p> <p>Here are the primary topics used by your biofireplace:</p> <p>Command Topics</p> <p>Command topics are used to send instructions to the biofireplace. The biofireplace subscribes to these topics, and you can publish messages to control its functions. Please refer to the section about finding your device ID if not connecting via auto discovery.</p> <ul style="list-style-type: none">- Toggle Fire: <code>`cmnd/{device_id}/F`</code><ul style="list-style-type: none">- Message: <code>`PRESS`</code>- Action: Toggles the fire on or off.- Increase Flame: <code>`cmnd/{device_id}/IF`</code><ul style="list-style-type: none">- Message: <code>`PRESS`</code>- Action: Increases the flame level.- Decrease Flame: <code>`cmnd/{device_id}/DF`</code><ul style="list-style-type: none">- Message: <code>`PRESS`</code>- Action: Decreases the flame level. <p><i>To be continued on page 4</i></p>

<p>C</p>	<p>Status Topics</p> <p>Status topics are used by the biofireplace to publish its current state and sensor data. You can subscribe to these topics to monitor the biofireplace.</p> <ul style="list-style-type: none"> - Flame Level: `stat/{device_id}/FL` - Message Format: `{“state”:”F<number>”}` - Information: Current flame level. <ul style="list-style-type: none"> - State: `stat/{device_id}/SS` - Message Format: `{“state”:”<state>”}` (e.g., “Igniting Fire”, “Fire Running”, “Emptying Fireplace”) - Information: Current operational state of the biofireplace. <ul style="list-style-type: none"> - Fuel Level: `stat/{device_id}/FLS` - Message Format: `{“state”:”<percentage>”}` - Information: Current fuel level as a percentage.
<p>D</p>	<p>Home Assistant Integration</p> <p>If you use Home Assistant for home automation, your biofireplace can automatically integrate using MQTT Discovery. When enabled, your biofireplace will announce its presence to Home Assistant, which will then automatically create entities for you to control and monitor.</p>
<p>E</p>	<p>Enabling MQTT Discovery</p> <ul style="list-style-type: none"> - Discovery Topic: `homeassistant/sensor/{device_id}/{sensor_id}/config` - The device publishes its configuration under this topic for each sensor and control. <p>- Configuration Message:</p> <pre>{ "name": "Flame Level", "uniq_id": "{device_id}FL", "stat_t": "stat/{device_id}/FL", "unit_of_meas": "%", "value_template": "{{ value_json.state }}", "device": { "ids": "{serial_number}", "name": "{model}", "mf": "Decoflame Aps", "mdl": "{model}", "sw": "{software_version}", "cu": "https://www.decoflame.dk" } }</pre> <p>Repeat this for each sensor and command to create a complete setup in Home Assistant.</p>

4. Publishing and Subscribing to Topics ▶

1	<p>Publishing Messages</p> <p>To control the biofireplace, you publish messages to the command topics. For example, to toggle the fire:</p> <p>Topic: <code>cmnd/{device_id}/F</code> Message: <code>PRESS</code></p>
2	<p>Subscribing to Topics</p> <p>To monitor the biofireplace, you subscribe to the status topics. For example, to get updates on the flame level:</p> <p>Topic: <code>stat/{device_id}/FL</code></p> <p>Your MQTT client will receive messages whenever the flame level changes.</p>

Example Use Cases

1. Turn On/Off the Fire
 - Publish `'PRESS'` to `'cmnd/{device_id}/F'`.
2. Increase the Flame Level
 - Publish `'PRESS'` to `'cmnd/{device_id}/IF'`.
3. Monitor Fuel Level
 - Subscribe to `'stat/{device_id}/FLS'` to receive updates on fuel level.
4. Integrate with Home Assistant
 - Ensure auto-discovery is enabled and Home Assistant will create the necessary entities automatically.

By following this guide, you can effectively control and monitor your biofireplace using MQTT, enhancing your home automation experience.

5. How to Find Your Device ID for your Product ►

Finding your Device ID is an important step to connect and manage your device via MQTT. This guide will help you locate the Device ID for your product in a few simple steps.

Step-by-Step Guide:

The device ID will be visible on the display unit at boot. The id will look something like this “Deco853E5C”. If this is not an option for you please follow the instructions below.

1	Connect to the Device's WiFi Network: <ul style="list-style-type: none">- Power on your device.- On your smartphone, tablet, or computer, go to the WiFi settings.- Look for a network named `DecoflameAP` (or similar).- Connect to this network. The default password is `123456789`.
2	Access the Device Configuration Page via DNS: <ul style="list-style-type: none">- Once connected to the device's WiFi network, open a web browser.- In the address bar, type `http://decoflame-d.local` and press Enter.- This will open the device's configuration page.
3	Navigate to the MQTT Settings Page: <ul style="list-style-type: none">- On the configuration page, look for a menu or link named “MQTT Settings”.- Click on this link to open the MQTT settings page.
4	Locate the Device ID: <ul style="list-style-type: none">- On the MQTT settings page, you will see a section with various input fields such as MQTT Server, Port, Username, and Password.- Below these fields, you will find a section labeled “Device ID”.- The Device ID will be displayed here as a unique string, e.g., `deco123456`.
5	Record Your Device ID: <ul style="list-style-type: none">- Write down the Device ID exactly as it appears on the page.- You will need this ID to configure your device and connect it to your MQTT broker.
6	Example of a Device ID: <ul style="list-style-type: none">- If your device's MAC address is `AA:BB:CC:12:34:56`, your Device ID might look something like `deco123456`.- This ID is unique to your device and is used for identification and communication with the MQTT server.

Troubleshooting:

1	Cannot Find the Device's WiFi Network: <ul style="list-style-type: none">- Ensure the device is powered on.- Move closer to the device to ensure a stronger WiFi signal.- Restart your device and try connecting again.
2	Cannot Access the WiFiManager Portal: <ul style="list-style-type: none">- Ensure you are connected to the device's WiFi network.- Try typing `192.168.4.1` in the address bar manually.- Try a different web browser.
3	Device ID Not Displayed: <ul style="list-style-type: none">- Make sure you are on the correct page (MQTT Settings).- If the Device ID is still not visible, restart the device and try again.

By following these steps, you should be able to easily find your Device ID.

This ID is crucial for connecting your device to the MQTT broker and managing it remotely.

If you have any further questions or encounter issues, please refer to the troubleshooting section or contact our support team for assistance.



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Follow the Fire Authorities and national and local requirements regarding bioethanol fireplaces.

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